Luke Air Force Base (AFB), located 20 miles northwest of Phoenix, Arizona, is home to the largest fighter pilot training base in the world.

### Luke Air Force Base, Arizona

<table>
<thead>
<tr>
<th>Technology Highlights</th>
<th>Program Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Upgraded 874 military family housing units, installing new heating and air conditioning systems and replacing aging lighting with energy-efficient fixtures</td>
<td><strong>Total Contract Amount ($)</strong></td>
</tr>
<tr>
<td>□ Major lighting upgrades (including significant daylighting) for over 260 buildings, including two aircraft engine maintenance facilities</td>
<td>$25,620,659</td>
</tr>
<tr>
<td>□ Installation and expansion of Staefa energy management control system (EMCS) in 163 buildings.</td>
<td><strong>Annual Energy Savings ($/yr.)</strong></td>
</tr>
<tr>
<td>□ Major upgrade of building's heating, ventilation, and air conditioning (HVAC) systems.</td>
<td>$2,477,001</td>
</tr>
<tr>
<td>□ Central Plant Upgrade –Replaced Chillers, converted to VFD pumping, Thermal Storage, valves, switchgear</td>
<td><strong>Annual Ancillary Savings ($/yr.)</strong></td>
</tr>
<tr>
<td>□ Photovoltaic Solar Roof- 375 kW</td>
<td>$473,000</td>
</tr>
<tr>
<td>□ Water Treatment Services- Base wide- 7000 Tons &amp; 150 Boilers</td>
<td><strong>Project Term (years)</strong></td>
</tr>
</tbody>
</table>

- 20 (average)
- **Simple Payback (years)**
- 7 (average)
- **Delivery Orders (#)**
- 4 awarded
- **Facility Size (sq. ft.)**
- 5,050,000
- **Number of Buildings**
- 900
- **Contract Vehicle**
  - USAF Regional & DOE
- **Award Date**
  - 06/ 06
- **Delivery Order Status**
  - Ongoing, Construction and Maintenance Phases

### ESPC Technology Categories
- **Boiler Plant Improvements**
- **Chiller Plant Improvements**
- **Building Automation Systems**
- **HVAC**
- **Lighting Improvements**
- **Building Envelope Modifications**
- **CHW, HW, and Steam Distribution Systems**
- **Electric Motors and Drives**
- **Refrigeration**
- **Distributed Generation**
- **Renewable Energy Systems**
- **Energy/Utility Distribution Systems**
- **Water and Sewer Conservation Systems**
- **Energy Cost Reduction through Rate Adjust.**
- **Energy Related Process Improvements**
- **Energy Surveys**

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